

## CLAIMS

1/ A method of testing the operation of an electronic unit by simulation, said unit being suitable for generating logic signals at specific instants while the simulation is being performed by a simulator fitted with at least one microprocessor, said simulator sending simulated input signals to said unit and receiving output signals therefrom in response thereto, the method consisting in processing some of the output signals from said unit as they are issued by means of at least one programmable logic circuit, in storing values of parameters corresponding to said processed signals, and in causing said microprocessor to access said stored parameter values at a frequency which is compatible with its own operating frequency.

2/ A method according to claim 1, wherein said parameter values are representative of switching instants of logic signals generated by said unit.

3/ A method according to claim 2, wherein said parameter values are an image of said switching instants, of the duration during which a logic variable has a predetermined value, and/or the mean value of a logic variable over a predetermined period.

4/ A method according to claim 1, consisting in sending at least some of the signals generated by said microprocessor to at least one second programmable logic circuit and in sending simulation signals to said unit, the simulation signals being generated by said second programmable logic circuit while said microprocessor is not in communication with said unit.

5/ Apparatus for testing the operation of an electronic unit by simulation, said unit being suitable for generating logic signals at specific instants, said

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5 11/ An installation for testing electronic units for fitting to a rail vehicle or to an electric vehicle, the installation comprising at least one apparatus according to claim 5.